

1. Record Nr.	UNINA9910483550203321
Titolo	SOFSEM 2015: Theory and Practice of Computer Science : 41st International Conference on Current Trends in Theory and Practice of Computer Science, Pec pod Sněžkou, Czech Republic, January 24-29, 2015, Proceedings // edited by Giuseppe Italiano, Tiziana Margaria-Steffen, Jaroslav Pokorný, Jean-Jacques Quisquater, Roger Wattenhofer
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-46078-5
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (XVI, 616 p. 116 illus.) : online resource
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 8939
Disciplina	004.015113
Soggetti	Computer science—Mathematics Discrete mathematics Algorithms Information storage and retrieval systems Software engineering Artificial intelligence Cryptography Data encryption (Computer science) Discrete Mathematics in Computer Science Information Storage and Retrieval Software Engineering Artificial Intelligence Cryptology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Keynote Talk -- What is Computation: An Epistemic Approach -- Foundations of Computer Science -- Progress (and Lack Thereof) for Graph Coloring Approximation Problems -- Recent Results in Scalable Multi-Party Computation -- Online Bipartite Matching in Offline Time (Abstract) -- Software & Web Engineering -- Quo Vadis Explicit-State Model Checking -- The Dos and Dont's of Crowdsourcing Software

Development -- Data, Information and Knowledge Engineering -- Adaptively Approximate Techniques in Distributed Architectures -- Back to the Future – Should SQL Surrender to SPARQL? -- Foundations of Computer Science -- Balancing Energy Consumption for the Establishment of Multi-interface Networks -- The Maximum k-Differential Coloring Problem -- Exact Algorithms for 2-clustering with Size Constraints in the Euclidean Plane -- Local Routing in Convex Subdivisions -- Nondeterministic Modal Interfaces -- Group Search on the Line -- Online Makespan Scheduling with Sublinear Advice -- Deterministic Rendezvous in Restricted Graphs -- Fastest, Average and Quantile Schedule -- Machine Characterizations for Parameterized Complexity Classes Beyond Para-NP -- Maximally Permissive Controlled System Synthesis for Modal Logic -- Approximation Hardness of the Cross-Species Conserved Active Modules Detection Problem -- Finding Highly Connected Subgraphs -- Fixing Improper Colorings of Graphs -- Efficient Online Strategies for Renting Servers in the Cloud -- Palk is Linear Recognizable Online -- Two Grammatical Equivalents of Flip-Pushdown Automata -- On the Hierarchy Classes of Finite Ultrametric Automata -- Nash-Williams-type and Chvat' al-type Conditions in One-Conflict Graphs. -Optimal State Reductions of Automata with Partially Specified Behaviors. -Quantum Pushdown Automata with a Garbage Tape -- Towards a Characterization of Leaf Powers by Clique Arrangements -- Filling Logarithmic Gaps in Distributed Complexity for Global Problems -- On Visibly Pushdown Trace Languages -- Dominating an s-t-Cut in a Network -- Lower Bounds for Linear Decision Trees with Bounded Weights -- Software & Web Engineering -- A Model-Driven Approach to Generate External DSLs from Object-Oriented APIs -- Function Based Requirements Engineering and Design – Towards Efficient and Transparent Plant Engineering -- Software Developer Activity as a Source for Identifying Hidden Source Code Dependencies -- Discovering Motifs in Real-World Social Networks -- Data, Information, and Knowledge Engineering -- Exploiting Semantic Activity Labels to Facilitate Consistent Specialization of Abstract Process Activities -- Efficient Similarity Search by Combining Indexing and Caching Strategies -- Retrieving Documents Related to Database Queries -- Advantages of Dependency Parsing for Free Word Order Natural Languages -- Detecting Identical Entities in the Semantic Web Data -- Conducting a Web Browsing Behaviour Study – An Educational Scenario -- A Uniform Programming Language for Implementing XML Standards -- OntoSDM: An Approach to Improve Quality on Spatial Data Mining Algorithms -- Cryptography, Security, and Verification -- Attribute-Based Encryption Optimized for Cloud Computing -- Trustworthy Virtualization of the ARMv7 Memory Subsystem -- True Random Number Generators Secure in a Changing Environment: Improved Security Bounds -- Java Loops Are Mainly Polynomial.

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## Sommario/riassunto

This book constitutes the proceedings of the 41st International Conference on Current Trends in Theory and Practice of Computer Science held in Pec pod Sněžkou, Czech Republic, during January 24-29, 2015. The book features 8 invited talks and 42 regular papers which were carefully reviewed and selected from 101 submissions. The papers are organized in topical sections named: foundations of computer science; software and Web engineering; data, information, and knowledge engineering; and cryptography, security, and verification.

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